

BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )

Allocation of Spectrum Below )  
5 GHz Transferred From )  
Federal Government Use )

ET Docket No. 94-32

To: The Commission

DOCKET FILE COPY ORIGINAL

COMMENTS  
OF THE  
AMERICAN PETROLEUM INSTITUTE

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**SUMMARY**

The American Petroleum Institute ("API") urges the Commission to reconsider its proposal to auction the frequency band 4660-4685 MHz. API realizes that auctions may be an efficient means to license spectrum among competing commercial users, but API firmly believes that auctions should not be used to allocate spectrum resources between different types of services, such as commercial and private, or fixed and mobile services. Congress mandated that competitive bidding be used to award licenses from mutual exclusive applications. API submits that the Commission's proposal to auction spectrum from among a range of fixed and mobile services transgresses the crucial distinction between allocation and licensing functions.

Moreover, auctions should not be used to reach licensing decisions between private and commercial users. Private users provide telecommunications services within their own organizations rather than to subscribers. Without a subscriber base, private users would not meet the Commission's proposed construction requirements and would not have sufficient capital with which to meaningfully compete in an auction.

Instead, API urges the Commission to reestablish vital narrowband communications systems to replace the 2.1 GHz systems lost in the spectrum reallocation made for emerging technologies. While limited accommodations were made for replacement spectrum in the Commission's Docket No. 92-9 proceeding, the Commission made no adequate accommodation for narrowband communications systems which will be displaced from the bands 2130-2150 MHz and 2180-2200 MHz.

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AMERICAN PETROLEUM INSTITUTE

The American Petroleum Institute ("API"), by its attorneys, pursuant to the invitation extended by the Federal Communications Commission ("Commission") in its First Report and Order and Second Notice of Proposed Rule Making ("Notice"),<sup>1/</sup> in the above-referenced proceeding, respectfully submits the following Comments.

**I. PRELIMINARY STATEMENT**

1. API is a national trade association representing approximately 300 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing, and transportation of petroleum, petroleum products and natural gas. Among its

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<sup>1/</sup> 60 Fed. Reg. 13071 (March 10, 1995).

many activities, API acts on behalf of its members as spokesperson before federal and state regulatory agencies. The API Telecommunications Committee is one of the standing committees of the organization's Information Systems Committee. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the oil and gas industries.

2. API's Telecommunications Committee is supported and sustained by licensees that are authorized by the Commission to operate, among other telecommunications facilities, point-to-point and point-to-multipoint systems in the Private Operational-Fixed Microwave Service that is governed by Part 94 of the Rules and Regulations. These telecommunications facilities are used to support the search for and production of oil and natural gas. Such systems are also utilized to ensure the safe pipeline transmission of natural gas, crude oil and refined petroleum products, and for the processing and refining of these energy sources, as well as for their ultimate delivery to industrial, commercial, and residential customers. The facilities licensed to API's members are therefore essential to the provision of our nation's energy sources.

3. API's members utilize these systems to serve a variety of vital point-to-point and point-to-multipoint telecommunications requirements, including communications between oil and gas exploration and production sites, for supervisory control and data acquisition (SCADA) systems, to communicate with refineries, and to extend circuits to pipeline pump and compressor stations.

4. The purpose of this proceeding is to ascertain the most appropriate use for 50 MHz of spectrum being transferred from Federal Government use to private sector use in accordance with a mandate of the Omnibus Reconciliation Act of 1993 (Act).<sup>2/</sup> The Act requires the Commission to implement an allocation and assignment plan which accounts for "the safety of life and property in accordance with the policies of Section 1 of the 1934 Act (47 U.S.C. § 151)."<sup>3/</sup>

5. API previously filed Comments and Reply Comments in this proceeding.<sup>4/</sup> In those previous statements, API

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<sup>2/</sup> Omnibus Reconciliation Act of 1993, Title VI, § 6001(a)(3) (1993).

<sup>3/</sup> Omnibus Reconciliation Act of 1993, Title VI, Part B, § 115(b)(1)(c) (1993).

<sup>4/</sup> See, Comments of the American Petroleum Institute, FCC ET Docket No. 94-32, June 15, 1994; see also, Comments of (continued...)

pointed out that oil and gas companies as well as other private users of non-commercial services such as manufacturers, utilities, and railroads have a vital need for narrowband long haul communications capabilities in order to meet public safety and environmental protection concerns. API also reminded the Commission that competitive bidding is not required to offer spectrum to private users.<sup>4/</sup> Nevertheless, the Commission's current proposal would award the 4660-4685 MHz band to the highest bidder among numerous fixed and mobile services, regardless of the need for the service or the resultant effect on "the safety of life and property."

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<sup>4/</sup>(...continued)

the American Petroleum Institute, FCC ET Docket No. 94-32, December 19, 1994; see also, Reply Comments of the American Petroleum Institute, FCC ET Docket No. 94-32, January 6, 1995.

<sup>5/</sup> API submitted that the Omnibus Budget Reconciliation Act only notes that competitive bidding may apply if the Commission determines that "the principal use of such spectrum will involve, or is reasonably likely to involve, the licensee receiving compensation from subscribers . . . ." Omnibus Budget Reconciliation Act of 1993, Title VI, § 6002 (1993). Private users such as API members will not use the spectrum to provide commercial service.



## II. COMMENTS

### A. **The Commission Should Not Auction Spectrum Among Different Types of Services and Between Private and Commercial Users**

6. API submits that the Commission's proposal to utilize auctions involving a variety of fixed and mobile services would be an improper means of allocating spectrum. API reminds the Commission that auctions are permitted only to assign licenses, not to determine spectrum allocations. Section 309(j), which authorized competitive bidding for mutually exclusive license applications, specifically provides that "nothing in this subsection, or in the use of competitive bidding, shall alter spectrum allocation criteria or procedures established by the other provisions of this chapter."<sup>6/</sup> In addition, the House Committee Report which addresses Section 309(j) indicated Congress' resolve that "the FCC cannot base an allocation decision. . . solely or predominantly on the expectation of more revenues."<sup>7/</sup>

7. In addition, API submits that auctions between both private and commercial users would result in

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<sup>6/</sup> 47 U.S.C. 309(j)(6)(A) (1993).

<sup>7/</sup> 1993 USCCAN at 585.

economically inefficient assignments in the band 4660-4685 MHz. Only commercial users have subscriber bases to meet the Commission's proposed construction requirements. Furthermore, these subscriber bases provide commercial users with ample funds for auction bids. Private users, on the other hand, have no subscriber bases and would not ordinarily be able to compete with commercial users in auctions.

8. API submits that commercial users -- despite their subscribers and their auction cash -- are not necessarily the parties with the highest social or economic utility for the band 4660-4685 MHz. For example, it is difficult to place an exact price on the social and economic value of a regular and affordable supply of petroleum products and natural gas to American consumers. API stresses to the Commission that API members need narrowband long haul systems to ensure this regular and affordable supply of oil and gas from remote fields in both offshore and onshore environments.

9. While the value of this energy supply to the economy and society overall is certainly great, API members do not have the necessary subscriber base to meet the Commission's proposed subscriber base requirements and to

provide cost justification for competitive auction bids against commercial service providers. Even though private users may have greater economic and social justification for use of the band 4660-4685 MHz, private users would simply be unable to compete against commercial services in an auction.

10. Instead, the Commission's proposal would force private users to rely on commercial providers which generally offer more expensive and/or less suitable communications -- or no service at all in some remote areas. This increase in cost and decrease in reliability could raise consumer prices for products and services furnished by private users.

11. Auctions which are open to both private and commercial users ignore the inherent value of communications services to private users and their consumers and unfairly favor commercial users with subscriber bases and up-front capital. Instead, the Commission should license frequencies in the band 4660-4685 MHz to private users on the same coordinated basis employed in existing frequency bands governed by Part 94.

**B. Commercial Providers Cannot Adequately Meet the Needs of Private Users**

12. API urges the Commission to recognize that private users should not be forced to depend upon commercial providers for essential communications, including disaster prevention and emergency response. For example, commercial users normally operate at low loading thresholds. When emergencies occur, these low loading thresholds are quickly overrun by a surge in public demand. Private users, however, must be able to communicate in emergencies. API submits that commercial users simply cannot provide private services with adequate and reliable communications capabilities *during* emergencies.

13. In addition, private users often operate in remote and inhospitable locations. Commercial users do not normally offer service in many of these areas. Where commercial users do offer service, these services are usually more costly for private users than their own systems. Furthermore, when those commercial users that do operate in remote locations experience system outages or disruption, service is often not restored as promptly as necessary to support sensitive operations. By contrast, when private users in remote locations experience system trouble, service is generally restored promptly.

14. The Commission proposed to utilize the same strictly defined geographical boundaries applied to PCS licenses. These boundaries, which cover either a Basic Trading Area (BTA) or Major Trading Area (MTA), may be appropriate for commercial users; however, API submits that such artificial boundaries have little or no relationship to the service areas of private users, i.e., utility service boundaries, public safety territories, production fields, and pipelines. This is especially true given the narrowly constructed, but extremely long, communications paths required to serve right-of-way users, such as oil and gas pipelines. Many energy industry telecommunications needs cannot be met by commercial providers.

**C. The 4660-4685 MHz Band Should Be Allocated for Primary Fixed Use**

15. In its Notice, the Commission invited comment on an alternative proposal for utilization of the band 4660-4685 MHz by specific services rather than by a variety of services. API urges the Commission to designate the band 4660-4685 MHz for primary fixed use to fulfill, to a limited extent, loss of the narrowband allocation from the bands 2130-2150 MHz and 2180-2200 MHz.

16. Private users must have adequate narrowband options to operate efficient communications systems. In Docket No. 92-9, the Commission displaced private users' narrowband systems without providing sufficient spectrum for relocation of those narrowband systems. Private users will be vacating all narrowband spectrum below 6 GHz. To make matters worse, inversion effects in areas of operation, such as the Gulf of Mexico, frequently render narrowband systems above 6 GHz unsuitable to support offshore production and pipeline operations. It is imperative that sufficient narrowband capability, particularly narrowband long haul capability, be restored to private users.

17. Accordingly, API submits the following channelization plan for the band 4660-4685 MHz. Implementation of this plan will fulfill the Congressional intent behind reallocation of spectrum from Federal Government to private sector use.<sup>8/</sup> In addition, this plan resolves the reservations expressed by the Commission that pairing would be needed in order to allocate the band 4660-4685 MHz to private fixed users.

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<sup>8/</sup> The Omnibus Reconciliation Act of 1993 requires the Commission to implement an allocation and assignment plan which accounts for "the safety of life and property in accordance with the policies of Section 1 of the 1934 Act (47 U.S.C. § 151)." Omnibus Reconciliation Act of 1993, Title VI, Part B, Section 115(b)(1)(c) (1993).

18. Specifically, the Commission should channelize the band 4660-4685 MHz to permit operation of 800 kHz bandwidth channels for fixed point-to-point microwave systems. Exhibit A specifies API's proposal to permit private users to efficiently utilize spectrum in the band 4660-4685 MHz.

### III. CONCLUSION

19. API urges the Commission to recognize that auctions are an improper means of allocating spectrum among the various radio services. API acknowledges that auctions may be a proper tool to efficiently license spectrum among providers of the same type of commercial service when those providers submit mutually exclusive license applications. However, auctions are not a proper means of determining allocations of spectrum. In addition, API submits that the Commission's proposal to auction spectrum among different types of services would set a disturbing precedent by pitting providers of commercial services directly against providers of private services. API submits that such a plan is unworkable.

20. API emphasizes that commercial providers cannot adequately replace private users' narrowband systems. In fact, the telecommunications capabilities of API member

companies were severely diminished by the loss of fixed operations at 2.1 GHz. This loss of fixed operations adversely impacts the safe and efficient production and delivery of the vital energy resources to this nation. API submits that the band 4660-4685 MHz should be allocated for primary fixed use. The channelization plan proposed here will permit efficient use of the band 4660-4685 MHz and will provide maximum protection of life and property.

**WHEREFORE, THE PREMISES CONSIDERED,** the American Petroleum Institute Telecommunications Committee respectfully submits the foregoing Comments and urges the Federal Communications Commission to act in a manner consistent with the views expressed herein.

Respectfully submitted,

**THE AMERICAN PETROLEUM INSTITUTE**

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EXHIBIT A

**800 kHz BANDWIDTH CHANNELS**

for Point-to-Point Part 101 Microwave

	TX or RX	TX or RX
Pair 1	4660.4	4677.4
Pair 2	4661.2	4678.2
Pair 3	4662.0	4679.0
Pair 4	4662.8	4679.8
Pair 5	4663.6	4680.6
Pair 6	4664.4	4681.4
Pair 7	4665.2	4682.2
Pair 8	4666.0	4683.0
Pair 9	4666.8	4683.8
Pair 10	4667.6	4684.6

*Notes:*

- Remainder of band could be used to provide a channel for vestigial sideband amplitude modulated surveillance video transmission
- Video licensed under Part 101
- Visual carrier frequency would be 4671.25 MHz, aural carrier frequency would be 4675.75 MHz
- Minimum dish size would be 4'
- Video transmitter power limited to +20 dBm TX maximum
- Adjacent channel protection available for point-to-point channels 1, 2, 9 and 10 only